

Problems of consolidation concerning the reclamation of the ex-hidrotherapic Establishment of “Oropa Bagni” (Biella)

by Cannatelli Marialuisa and Cascella Stefania Antonietta

Tutor: Ientile Rosalba

We are analysing a manufactured building of civil use, situated at the top of one of the hills that surround the city of Biella; we are interested in both its structural and natural peculiarity as well as its historical identity.

Born as hydrotherapic establishment, it had to meet functional and comfort requirements rather than aesthetics; at first sight, the building shows off all its magnificence; due to the constructive technique of that period, the building materials and the volumetrical restraints imposed by the treatments that were adopted over there.

“Oropa Bagni” is the first of five hydrotherapic establishments built in the second half of XIX century in the province of Biella, trying to import to Italy the latest curative methods from Europe.

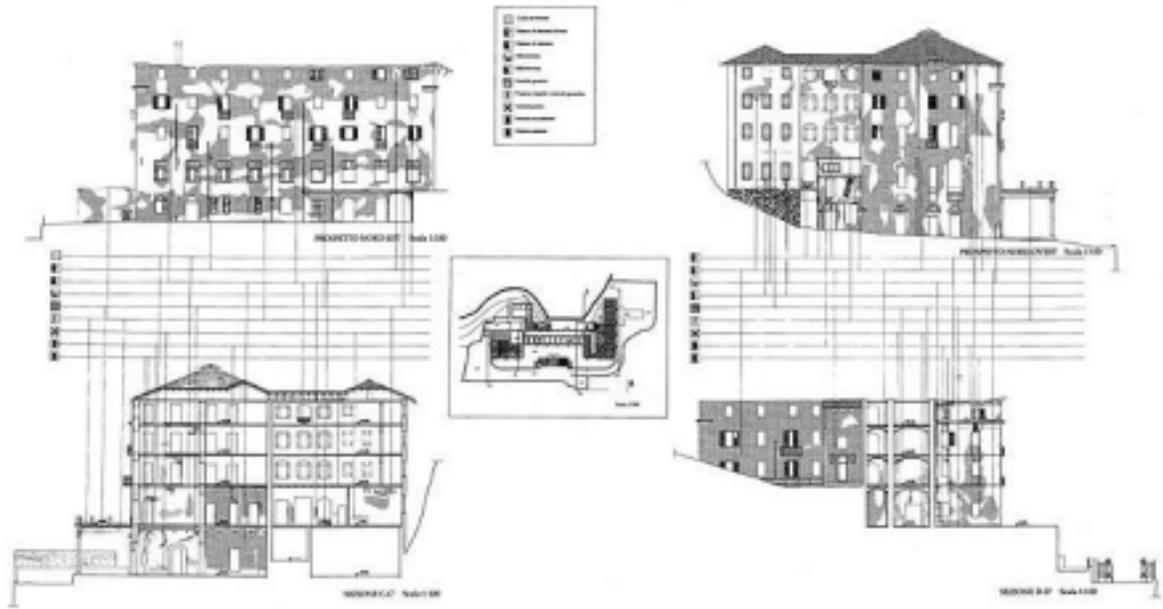
Built in 1856 as a farm, a progressive amplification was required to get to the present construction in order to be able to give hospitality to an increasingly number of people welcoming with enthusiasm the innovating cures.

The building has been a hydrotherapic establishment until the early nineties; later on, after they gave it to the Archbishopric of Alessandria, it has been used as home for the seminarists in the summer time.

The building was disposed of in 1980 to “Fonte Gioiosa S.p.a.” company, which wanted to set up its administrative offices and its water bottling activity right in there; the impossibility to obtain the necessary permissions did not make it possible.

Now it belongs to “Lauretana S.p.a.” company, which is planning to recover the building for receptive, curative and expositive activities.

The high degradation and damages the factory suffers from, at present, has provided a good range of problems, to be considered in order to develop a proposal of consolidation.



pict.1

We had to deal with a good range of measurements, which has permitted to draw up the surveying of plans, views and sections in scale 1:100 and even 1:200 sometimes (pict1) through icons and different symbols, the surveying has been the necessary base which graphically gave back to us the typologies of degradation and damage we have verified. The surveying of materials has been another method of representation proposed in scale 1:50; it shows reality at once in a legible way. (pict. 2).



pict. 2

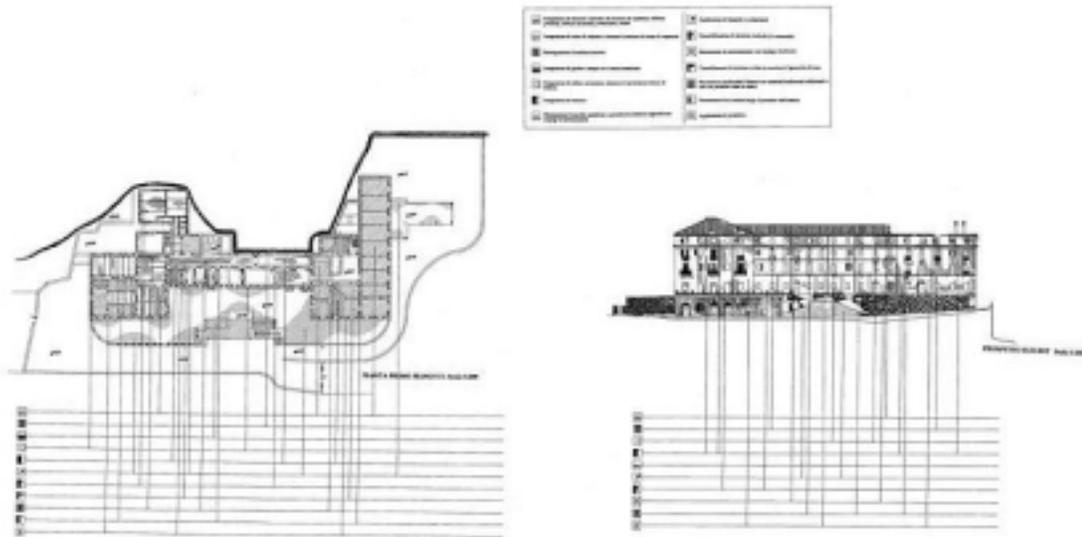
The surveying operation has given us the base which made it possible to point out those structural parts in which a stability and resistance verify was needed the most, just because they were particularly loaded or damaged.

Each consolidation work provides for the analysis of the carrying and pushing structures.

In our case, the Mery's static test has been applied to the typologies of the existing vaults, to find out if the damage comes from their own condition.

Besides, a particularly cracked front-strip piece of wall has been checked up with a compression test.

Starting from an existing proposal of reclamation, we have focalized our attention on the possible methods of consolidation we could use for the factory itself to be brought back to safety conditions again and, in any case, to prevent the persisting state of decay from causing irreparable damages, turning it all into a mass of ruins, (pict.3).



pict. 3

We have proposed roofing-over and floors reconstruction works and the restitching of the walls either by string-courses or reinforced brick works and injections.

A particular attention has been paid to re-establish all the vertical linkworks which had already collapsed; as well as for the great staircase, which would be integrated by marble steps of the same structural typology, even though of different colouring.

Besides, repairing works have been proposed to bring the walls, the external places and the whole decorations back to their previous conditions.

For further information:

e-mail: cannatelliluisa@libero.it

stefaniacascella@libero.it